WHAT IS CLAIMED IS:

1. A method for adjusting a reference level of an analog signal from a plurality of periodically sampled points, said method comprising steps of:

comparing a first number of sampled points having levels higher than an initial reference level with a second number of sampled points having levels lower than said initial reference level within a specified period;

raising said initial reference level when said first number is greater than said second number, and lowering said initial reference level when said first number is less than said second number, thereby obtaining a new reference level, and defining said new reference level as a first-stage reference level;

determining a first level shift from said first-stage reference level to a last second sampled point within said specified period and a second level shift from said first-stage reference level to a last sampled point within said specified period when one of a first level of said last second sampled point and a second level of said last sampled point is higher than said first-stage reference level and the other is lower than said first-stage reference level; and

moving said first-stage reference level toward said first level when an absolute value of said first level shift is greater than an absolute value of said second level shift, and moving said first-stage reference level toward said second level when said absolute value of said first level shift is less than said absolute value of said second level shift, thereby defining a second-stage reference level.

2. The method according to claim 1 wherein said first-stage reference level is defined by adding a positive constant value to said initial reference level when said first number is greater than said second number or subtracting said positive constant value from said initial reference level when said first number is less than said second number.

3. The method according to claim 1 wherein said second-stage reference level is obtained by steps of:

summing said first level shift and said second level shift to obtain a sum of shift;

multiplying said sum of shift by an adjusting parameter to obtain a shifting value; and

summing said first-stage reference level and said shifting value to obtain said second-stage reference level.

4. The method according to claim 1 wherein said steps are repeated for next sampled point by using said second-stage reference level as said initial reference level.

5. The method according to claim 1 wherein said step of comparing said first number with said second number and said step of raising/lowering said initial reference level are repetitively performed with said new reference level in lieu of said initial reference level until said first number is equal to said second number, and the latest reference level resulting in the equality of said first number to said second number is defined as said first-stage reference level.

6. The method according to claim 1 wherein said initial reference level is preset before said comparing step is performed.

7. The method according to claim 1 for use in a photoelectric system, wherein said analog signal is a radio frequency (RF) signal.

8. The method according to claim 1 for use in a photoelectric system to adjust a zero-crossing level.

9. The method according to claim 1 for use in a photoelectric system, wherein said photoelectric system is a compact disk-read only memory (CD-ROM) drive, a compact disk-rewritable (CD-RW) drive, a digital versatile disk-read only

memory (DVD-ROM) drive, a digital versatile disk-recordable (DVD-R) drive, a digital versatile disk-rewritable (DVD-RW) drive or a digital versatile disk-random access memory (DVD-RAM) drive.

10. A method for adjusting a reference level of an analog signal from a plurality of periodically sampled points, said analog signal being generated by a photoelectric system, said method comprising steps of:

determining a first level shift from a preliminary reference level to a last second sampled point within a specified period and a second level shift from said preliminary reference level to a last sampled point within said specified period when one of a first level of said last second sampled point and a second level of said last sampled point is higher than said preliminary reference level and the other is lower than said preliminary reference level; and

moving said preliminary reference level toward said first level when an absolute value of said first level shift is greater than an absolute value of said second level shift, and moving said preliminary reference level toward said second level when said absolute value of said first level shift is less than said absolute value of said second level shift, thereby defining an adjusted reference level.

11. The method according to claim 10 wherein said step of moving said preliminary reference level comprises sub-steps of:

summing said first level shift and said second level shift to obtain a sum of shift;

multiplying said sum of shift by an adjustment parameter to obtain a shifting value; and

summing said preliminary reference level and said shifting value to obtain said adjusted reference level.

12. The method according to claim 10 further comprising a step of obtaining said preliminary reference level by sub-steps of:

comparing a first number of sampled points having levels higher than an initial reference level with a second number of sampled points having levels lower than said initial reference level within said specified period; and

adding a positive constant value to said initial reference level to obtain said preliminary reference level when said first number is greater than said second number, and subtracting said positive constant value from said initial reference level to obtain said preliminary reference level when said first number is less than said second number.

13. The method according to claim 10 further comprising a step of obtaining said preliminary reference level by sub-steps of:

comparing a first number of sampled points having levels higher than an initial reference level with a second number of sampled points having levels lower than said initial reference level within said specified period;

adding a positive constant value to said initial reference level when said first number is greater than said second number, and subtracting said positive constant value from said initial reference level when said first number is less than said second number, thereby obtaining a new reference level;

using the new reference level in lieu of said initial reference level, and repeating the above steps until said first number is equal to said second number;

defining the latest reference level resulting in the equality of said first number to said second number as said preliminary reference level.

14. A digital signal processing device for use in a photoelectric system, comprising:

an analog-to-digital converter for converting an analog signal into a plurality of

periodically sampled signals in digital forms;

a zero-crossing level tracking circuit in communication with said analog-to-digital converter, determining a first level shift from an preliminary reference level to a last second sampled point within a specified period and a second level shift from said preliminary reference level to a last sampled point within said specified period when one of a first level of said last second sampled point and a second level of said last sampled point is higher than said preliminary reference level and the other is lower than said preliminary reference level, said zero-crossing level tracking circuit moving said preliminary reference level toward said first level when an absolute value of said first level shift is greater than an absolute value of said second level shift, and moving said preliminary reference level toward said second level when said absolute value of said first level shift is less than said absolute value of said second level shift, thereby defining an adjusted reference level; and

a detector in communication with said zero-crossing level tracking circuit, determining a level of said analog signal based on said adjusted reference level.

15. The device according to claim 14 wherein said zero-crossing level tracking circuit further performs operations of:

summing said first level shift and said second level shift to obtain a sum of shift;

multiplying said sum of shift by an adjustment parameter to obtain a shifting value; and

summing said preliminary reference level and said shifting value to obtain said adjusted reference level.

16. The device according to claim 14 wherein said zero-crossing level tracking circuit further performs operations of:

comparing a first number of sampled points having levels higher than an initial reference level with a second number of sampled points having levels lower than said initial reference level within said specified period;

raising said initial reference level when said first number is greater than said second number, and lowering said initial reference level when said first number is less than said second number, thereby defining said preliminary reference level.

17. The device according to claim 14 further comprising a retiming system circuit in communication with said analog-to-digital converter for checking said sampled signals to determine whether the features of said analog signal are retained.

18. The device according to claim 14 further comprising a phase-locked loop circuit in communication with said analog-to-digital converter, generating a clock signal referenced by said analog-to-digital converter to generate said periodically sampled signals.

19. The device according to claim 14 wherein said analog signal is a radio frequency (RF) signal.

20. The device according to claim 14 wherein said photoelectric system is a compact disk-read only memory (CD-ROM) drive, a compact disk-rewritable (CD-RW) drive, a digital versatile disk-read only memory (DVD-ROM) drive, a digital versatile disk-recordable (DVD-R) drive, a digital versatile disk-rewritable (DVD-RW) drive or a digital versatile disk-random access memory (DVD-RAM) drive.